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# DEPARTMENT OF COMMERCE

BUREAU OF FISHERIES
Seattle

November 24, 1928

The Commissioner of Fisheries, Washington, D. C.

I am pleased to submit to you the following report covering the salmon and herring packing and fishing operations in the Alaskan Peninusla region for the season of 1928 together with the activities of the Bureau of Fisheries in those waters.

Respectfully submitted,

Assistant Agent.

IN GENERAL

Taken as a whole conditions in the district during the season approximated the status in fishing, packing and operations generally of the average season.

The pack secured was approximately 100,000 cases larger than the pack of last season. It fell, however, under the 1926 pack---the largest the district ever produced---by over 150,000 cases.

The run of the Chum salmon was an outstanding feature of the season, being the largest by far that this variety has ever staged in those waters. It is my opinion there may have been as large runs of Chums likely in the recent past but, due to the fact that this variety has been fished for more, this years run seemed abnormal.

Another feature worthy of note was the pack of the Port Moller region which was the largest and best secured there since the upbuilding of those runs was undertaken by the Bureau several years ago.

The weather conditions throughout the district were normal this season. The intermittent storms that are usual in this region hampered fishing operations somewhat, but there was no loss of life nor was there the usual extraordinary disturbance of gear, which in the past has been a seasonal feature. Before the opening of the season continued

northerly winds of violent intensity prevailed. By the first of June these had changed to strong Southerly blows. Light Southerly winds blew throughout July and August with only occasional storms.

# BUREAU ACTIVITIES

An efficient and continuous patrol of all the fishing areas of the region was maintained throughout the season. All stream mouths, lagoons, and the bays closed to commercial fishing were systematically patrolled. The traps were regularly inspected during all closed periods and a check on the purse and beach seiners carefully kept.

Streams heretofore marked were checked and damaged or destroyed markers replaced. Areas closed by virtue of additional regulations were properly marked.

Counting weirs at Thin Point Lagoon and Middle Lagoon, were installed again this year and a weir site picked for Bear River near the lake outlet.

Surveys of all accessible spawning beds of importance were made during the active fishing season and a final check-up given at the close of fishing operations.

A patrol boat was stationed at Port Moller this year, for the first time, to supervise fishing activities in Port Moller, Herendeen Bay, Nelson Lagoon and Bear and Sandy Rivers.

A Streamguard was stationed at Unalaska to keep in contact with the herring packers who entered that region and packed herring on a large scale for the first time this year.

# CANNERIES OPERATED

Eight canneries operated in the Alaska Peninsula District this year, an increase of two plants over previous years. The two new operators entering the field this year were floating plants. One of these, the Santa Flavia, of the International Packing Company, has operated in the district in past years for a short time each season at Makushin Bay. This cannery spent almost the entire season there this year but failed to secure even a fair pack. The other new plant was the floating cannery "International", of the same company. At the close of fishing operations in Bristol Bay this plant entered the Peninsula Region to wind up their season here. This plant spent the last of the season anchored in Dolgoi Harbor. They previously spent a few days at Unalaska with poor results and fared little better at Dolgoi Harbor.

The canneries operating, the location of their plants and their packs follow:

Company	Location of Plant	Total Cases
Everett Packing Co.,	Herendeen Bay,	35,330
P. E. Harris & Co.,	False Pass,	108,240

Company	Location of Plant	Total Gases
International Packing Co.,	Dolgoi and Dutch Harbors,	3,734
International Packing Co.,	Makushin Bay,	3,227
Pacific American Company,	Ikatan Bay,	57,832
Pacific American Company,	King Cove,	101,295
Pacific American Company,	Port Moller,	41,633
Shumagin Packing Company,	Squaw Harbor,	102,693

## SALMON RUNS

The first run of salmon to enter Alaska Peninsula waters is the Migrating Red. This run appeared in Alaska Peninsula waters at about the usual time during the early days of June. It reached its peak on June 11th at Squaw Harbor and vicinity and June 12th at Ikatan and vicinity. During the duration of this Migrating Red run in Peninsular waters, packers failed to secure what they believed constituted a normal percentage catch, owing to weather conditions and closed seasons. Judging from the extensive showing of the schools of fish making up this run in off-shore waters adjacent to the Alaska Peninsula only a small percentage of the migrating schools penetrated the fishing areas of the region. This is based upon the catches made. Catches were heaviest in East Anchor Cove and the lower Ikatan Peninsula. Trap catches in upper Ikatan Bay were a great deal lighter and Morzhovoi Bay was a failure for the second successive year. In the vicinity of Kelly Rock in the Shumagin region the migrating run penetrated only in fair numbers.

Following the Migrating Red run fishing slackened during the last days of June and the first week of July. This period saw the red run fade to almost nothing while only a few chums, the forerunners of the main run, were being taken by the traps and beach seiners. By the end of the first week in July the chum run strengthened and continued throughout the entire month and into August. This chum run, as stated in opening paragraphs, was likely the heaviest ever experienced in Alaska Peninsula waters and was general throughout the entire region.

Interspersed with the heavy run of chums were scattered schools of humpbacks. Late in July and early August during the closing weeks of the season humpback catches increased but the heavy run expected by operators never materialized, and the result was the poorest run of record in any even year.

## CATCH STRAIN

The catch strain placed on the Migrating runs of red salmon in their migrations through Peninsula waters could be at best only an estimate.

The strain placed on the local runs of reds was not great. Seining for red salmon was very intermittent, first because the runs of this species are small and second because of the protective measures in effect. In the Port Moller region the long closed season insured an adequate escapement. Throughout the remainder of the Alaska Peninsula the strain fluctuated but in no instance, with the possible exception of Middle Lagoon, Morzhovoi Bay, was the commercial catch equivalent to the escapement. The above conclusions are based upon the catches made in close proximity to the various parent

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streams as compared to the escapement.

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The strain placed on the local run of chum salmon was heavy. This was due first to the increased number of traps in the chum salmon localities and secondly, to the beach seiners who increased the catch strain on the chum salmon runs by vigorously fishing the schools of this variety, especially after it seemed apparent that the heavy humpback run, expected this season, was not going to materialize. Despite the heavy fishing throughout the region by seiners, together with added traps the runs of chum salmon were so extensive that an adequate spawning reserve entered all the streams of the region.

The catch strain placed on the humpback runs was not great. This was caused through the light runs of this variety which did not make beach seining in humpback localities as profitable as in the chum salmon localities where the fish were more plentiful. The traps no doubt, caught a given percentage in ratio to the run but the escapement was larger than anticipated in view of the light runs.

### RUN CONSERVATION

At present, the migrating run of red in its sojourn in Peninsula waters is in no danger of being further impaired. In the past few years many steps of importance have been taken for the protection of this run in the Alaska Peninsula. Most of the areas frequented by these runs have been closed to traps, others have been closed to both seins and traps while still others are temporarily closed until the main body of these runs have passed.

Conditions affecting the local runs of chums and humpwacks are not so favorable. With curtailment of catch from the migrating runs, operators have looked to the inferior varieties of chums and humpbacks for a substitute. This has resulted in a continued increase in gear in the localities frequented by these varieties. Any further expansion of activities will endanger these runs in Belkofsky, Volcano and Pavlof bays and must be met by additional regulations where needed. In Morzhovoi and Cold bays where seining is prohibited during the early part of the season the runs are in no danger of further depletion. In the Shumagin region operations are not yet as extensive as in the vicinity of King Cove and are also more scattered in character and the runs are unimpaired. The remainder of the region is not, as yet, being overfished. Rather than extend the closed seasons, at present in effect, it would seem advisable to extend the closed areas further as overfishing or other occasion demands.

### LAGOON FISHING

Very little lagoon fishing was done by seiners the past season. This was mainly due to the closing of all red salmon lagoons in the region except Nelson Lagoon. Fishing for chum salmon was carried on to some extent however in King Cove Lagoon and Littlejohn, and Big Lagoon, of Morzhovoi Bay. These lagoons are ascended by chum salmon and are not closed to fishing. Due to the necessity of fishing on the flood tide, however, lagoon fishing was not persisted in except where weather conditions made fishing in other localities impossible or where fish were scarce. When fishing was permitted in red salmon lagoons in the past it was profitable as the fish brought a better price than

Owing to the limited amount of fishing of this nature, together with the difficulty of getting in and out of the lagoons, the runs were not impaired. Rocks are also numerous in the lagoons mentioned and prevent or impair extensive operations.

### SALMON ESCAPEMENTS

The salmon escapement by localities was generally good. The important streams of the region together with comments on the escapement follows:

Middle Lagoon, Morzhovoi Bay .- Red salmon stream, Poor run and escapement.

Kinzaroff's Lagoon, Cold Bay.-Red salmon stream, Fair run, good escapement.

Thin Point Lagoon.-Red salmon stream, Poor run and escapement.

Long John Lagoon, Pavlof Bay .- Red salmon stream, Good run and escapement.

Mortensons Lagoon, Cold Bay.-Red salmon stream, Fair run and good escapement.

Orzenoi River, Orzenoi Bay.-Red salmon stream, Fair run and escapement.

Wosnesenski Creek, Wosnesenski Island.-Red salmon stream, Poor run and escapement.

Red Cove, Popoff Island .- Red salmon stream, Fair run and escapement.

Johnny Nelson's Creek .- Red salmon stream, Poor run and escapement.

Acheredin Creek, Acheredin Bay.-Red salmon stream, Fair run and good escapement.

Nelson Lagoon, Bering Sea.-Red salmon stream, Run of reds fair, good escapement.

Bear River, Bering Sea.-Red salmon stream, Run of reds good, escapement good. After a careful survey of Bear River Lake and its tributary streams the escapement was estimated at one million red salmon.

Sandy River, Bering Sea.-Red salmon stream, Fair run of reds and fair escapement. This lake is able to accommodate many more salmon than it usually receives. One hundred thousand red salmon reached the spawning beds of Sandy River Lake this season.

Nagai Island, +Chum and humpback streams, Heavy runs of chums, poor runs of humpbacks. Escapement good.

Unga Island.-Chum and humpback streams, Heavy runs of chums, poor runs of humpbacks. Escapement good except Baralof Bay streams.

Mainland of Alaska Peninsula northeastward from Cape Swedania.-Runs and escapement of chums good generally. In this same region the run of humpbacks was light but owing to the area being closed to fishing they all

reached the spawning beds.

Balboa Bay.-Chum and humpback streams, Runs and escapement of both species good. In this bay humpbacks were present in tremendous numbers throughout the month of August. This bay seemed to be an exception to the generally slack run of humpbacks throughout the remainder of the region.

Pavlof Bay.-Chum and humpback streams, Runs of chums good and escapement good. Runs of humpbacks poor, escapement fair.

Volcano Bay.-Chum salmon streams, Runs of chums very heavy, escapement good.

Belkofsky Bay.-Chum and humpback streams, Runs of chums good, escapement fair, humpback runs poor, escapement poor.

Cold Bay.-Chum and humpback streams, Runs of chums good, escapement good, humpback runs poor, escapement fair.

Morzhovoi Bay.-Chum and humpback streams, Runs of chums good, escapement good, humpback runs poor, escapement fair.

False Pass.-Chum and humpback streams, Runs of chums good, escapement good, humpback runs poor, escapements poor.

## PATROL.

The Alaska Peninsula was more thoroughly patrolled during the past season than heretofore. This was made possible through the detail of the U.S.B.F. "Crane" to this region, in addition to the "Merganser" and the chartered boat "Auk" used in past seasons.

The "Crane" was able under most any weather conditions to proceed from one part of the district to another. Her speed and power, which is superior to that of either the chartered boat "Auk" or the "Merganser", enabled her to cover the region most intensively fished, at more frequent intervals than has been possible in the past. She was used to cover the territory between Ikatan and Pavlof Bays for the purpose of regular supervision of the intermediate territory. Trips of inspection were also made from time to time to other points where fishing activities were otherwise supervised by one of the other boats or local stream guards. She was used mainly in placing and picking up streamguards, erecting or replacing stream monuments, securing weir counts and most especially in patrolling the traps of the region.

The "Auk" in years past chartered for this service, was detailed to the Port Moller region where she performed very good service in visiting traps of that region and keeping a check on the operations of the ten purse seine boats fishing there.

The "Merganser" was stationed in the Shumagin Island section as in past seasons where she patrolled traps and fishing areas.

Thirty-seven traps were operated in the Alaska Peninsula this year, which was an increase of four over last year. One location, formerly operated by the Port Moller cannery, of the Pacific American Company, about two miles below Bear River, was abandoned. Five new locations were driven. One of these was put in by the Ikatan plant of the Pacific American Company near Sankin Island on the northerly shore of Ikatan Bay. Two were driven by the King Cove cannery, of the Pacific American Fisheries, one just below the closed area on the westerly shore of Pavlof Bay and the other on the easterly shore of the same bay about 1 mile above Cape Tolstoi. The fourth new location was driven by the Shumagin Packing Company on the south shore of Baralof Bay, across from the cannery site. The fifth new trap belonged to Rev. D. Hotovistsky, of Belkofsky, who became the first independent trap owner in the district. This trap was driven for him in Belkofsky Bay by the King Cove cannery of the Pacific American Company.

The Pacific American Company's cannery at King Cove still retained first position in point of numbers of traps constructed, driving 15 traps and one independent location for Rev. D. Hotovitsky. Three of these were driven in Morzhovoi Bay, two in Belkofsky Bay, five in Volcano Bay and six in Pavlof Bay.

The P. E. Harris Company operated the same locations as they did last year, namely, three in Ikatan Bay, two in East Anchor Cove, one near Belkofsky village and three in Pavlof Bay, a total of nine.

The Ikatan Cannery, of the Pacific American Company, operated six traps one more than last year. Five of these were located in Ikatan Bay and one just outside of the bay below Ikatan Point.

The Shumagin Packing Company drove four traps, an increase of one trap. The new trap was located in Baralof Bay, across from the cannery site. The others occupied their old positions as in former years.

The Port Moller cannery, of the Pacific American Company operated their Nelson Lagoon and Moller Bay traps but discontinued the Bear River location.

The Everett Packing Company and the two floating plants of the International Packing Company did not operate any traps.

### PURSE SEINES

Ten full purse seines were operated in the Port Moller-Herendeen Bay region of the Alaska Peninsula this year. This was one more than was operated last year and the same number as operated in 1926 in this region when the Pacific American Company at Port Moller and the Everett Packing Company in Herendeen Bay fished five boats each. Last year the Pacific American Company used but four seines.

The names of the boats, company operating same and their individual total catches follow:

Seine Boat	Operating Company	Total Catch
Arctic	Pacific American Company	79,564
Frostland	Everett Packing Company	95,634
Iceland	Everett Packing Company	108,376
Independence	Pacific American Company	82,305
Lion	Pacific American Company	78,126
Montague	Everett Packing Company	73,803
Red Feather	Pacific American Company	98,143
Rhode Island	Pacific American Company	100,940
Sunset	Everett Packing Company	97,755
Wisconsin	Everett Packing Company	76,050

#### BEACH SEINES

Twenty-three beach seines were operated in the Alaska Peninsula. The names of the companies, number of seines operated, and the total catches made follow:

Operating Company	Number of	Seines Operated	Total Catch
Shumagin Packing Company Squaw Harbor		Ten	415,000
Pacific American Company King Cove		Six	410,000
P. E. Harris & Company False Pass		Three	150,000
International Packing Compa (Floater Santa Flavia)		Two	50,000
International Packing Compact (Floater International	ny	Two	50,000

# GILL NETS

Gill netting in the commercial fishery of the Alaska Peninsula region was confined selely to Nelson Lagoon. Five set nets aggregating one hundred fathoms were operated by local inhabitants there who took a total of almost fifteen thousand red salmon. The fish were all sold to the Everett Packing Company.

#### FISH PRICES

Prices paid to independent fishermen, supplied with gear by the companies ranged from ten cents to twenty cents per fish for red salmon, seven to twelve and one-half cents for cohe salmon, fifty cents for king salmon, four to seven cents for chum salmon, and from two and one-half to four cents for humpback salmon.

In the Port Moller-Herendeen Bay region where the fishermen supplied their own boats and gear the prices paid were reds and cohos twelve cents each, kings fifty cents, and chums five cents.

Gill netters in Nelson Lagoon were paid twenty cents each for reds.

For the first time herring operations on a large scale were inaugurated this season in the Aleutian Islands of the Alaska Peninsula Region.

There was a big run of this fine commercial fish in Dutch Harbor last season of which packers took due note. This season the run again put in it's appearance about the middle of August, and at once assumed tremenduous proportions. Packers who have not been doing well in past years in other portions of Alaska sent seine boats to Dutch Harbor to prospect the run, Those arriving the middle of August made large catches. The first fishing was done August 15th and impounded the 16th. Good fishing lasted until August 23rd. By that time operators in the district had secured all the herring they could handle. The run, then slacking, only minor beach seining and gillnetting operations being conducted thereafter.

As this was the first year herring in commercial quantities were taken in those waters packers did not have sufficient crews and supplies to handle the immense numbers of herring impounded. The condition resulted in the latter part of the pack being of an inferior quality, the fish being bloated and scabby.

Reports of the immensity of the run caused quite an excitement in fishing and packing circles as far east as Central Alaskan waters. Floating plants among others pulled stakes and steamed to the new Eldorado. Many of them reached Dutch Harbor too late to make large catches and a few arrived too late to secure any fish.

The companies operating and the number of seine boats and 80-fathom pounds of herring secured follow:

Company	Number of Boats	Number of Pounds #
Utopian Fisheries	Three	Six
Enterprise Packing Company	One	Two
Johnson & Peterson Packing	Co. One	One
Nassau Fish Company	Three	Five
S. Sklaroff & Son ) Opera	ated Two	Three
Franklin Packing Co.) Joi	intly	
Crescent Herring Company)	Operated Two	Four
Aurora Packing Company )		

#NOTE.- Each "Pound" in the foregoing tabulation held approximately fifteen hundred barrels of herring.

In addition to the above the Latouche Packing Company arrived in the district too late to make any catch. The Drier Bay Packing Company also arrived too late to fish, but packed a few herring for the Utopian Fisheries Company, which outfit had more herring impounded than it could handle.

Several small outfits put up a few barrels, operating with beach seines and gill nets. The most important of these was Fritz Waage.

SUPPLEMENTARY RECOMMENDATIONS

Salmon fishing recommendations for the Alaskan Peninsula district were forwarded by the writer to you recently.

The appearance of herring runs of commercial size and importance in and about Dutch Harbor and the packing operations of this fish initiated there this season suggests a careful survey of the situation with a view to safe guarding of the runs.

Action taken by the Bureau this year consisted of sending Mr. Newcomb to Unalaska and Dutch Harbor as soon as reports reached me of the proportions of the run and the intentions of packers to take advantage of it in fishing and packing there.